

RAW SEQUENCE LISTING

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Application Serial Number: 10/019,284B

Source: TFW/6

Date Processed by STIC: 11-19-04

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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/019,284B

DATE: 11/19/2004

TIME: 16:42:06

Input Set : N:\FATIMA\10019284.txt

Output Set: N:\CRF4\11192004\J019284B.raw

3 <110> APPLICANT: IZUI, Masako
 4 SUGIMOTO, Masakazu
 5 KURAHASHI, Osamu
 6 NAKAMATSU, TSUYOSHI
 8 <120> TITLE OF INVENTION: DNA Encoding Sucrose PTS Enzyme II
 10 <130> FILE REFERENCE: 217677US0PCT
 12 <140> CURRENT APPLICATION NUMBER: US 10/019,284B
 13 <141> CURRENT FILING DATE: 2002-01-02
 15 <150> PRIOR APPLICATION NUMBER: JP 11-189512
 16 <151> PRIOR FILING DATE: 1999-07-02
 18 <160> NUMBER OF SEQ ID NOS: 21
 20 <170> SOFTWARE: PatentIn Ver. 2.0
 22 <210> SEQ ID NO: 1
 23 <211> LENGTH: 5969
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Brevibacterium lactofermentum
 27 <220> FEATURE:
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 29 <222> LOCATION: (3779)..(5761)
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 95 atg gac cat aag gac ctc gcg ctttgc acatcgttgc gacatttgc ggc ggc 3826
 96 Met Asp His Lys Asp Leu Ala Gln Arg Ile Leu Arg Asp Ile Gly Gly
 97 1 5 10 15
 98 gaa gac aac att gtc gcc gca cac tgt gca acg cgt tta cgc ctc 3874
 99 Glu Asp Asn Ile Val Ala Ala His Cys Ala Thr Arg Leu Arg Leu
 100 20 25 30
 101 gtg ctc aaa gac acc aag gat gtg gat cgc ctttgc acgttgc gat gat gat 3922
 102 Val Leu Lys Asp Thr Lys Asp Val Asp Arg Gln Ser Leu Asp Asp Asp
 103 35 40 45

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106 50 55 60	
107 gtc ggg cca ggc gat gtg gat cat gtt ttc aaa gaa ctc gat gac gca	4018
108 Val Gly Pro Gly Asp Val Asp His Val Phe Lys Glu Leu Asp Asp Ala	
109 65 70 75 80	
110 acc tcc aaa gac atc gct gtg tcc aca gag cag ctc aaa gat gtt gtg	4066
111 Thr Ser Lys Asp Ile Ala Val Ser Thr Glu Gln Leu Lys Asp Val Val	
112 85 90 95	
113 gct aac aac gcc aac tgg ttc agc cgt gct gtg aag gta ttg gcg gac	4114
114 Ala Asn Asn Ala Asn Trp Phe Ser Arg Ala Val Lys Val Leu Ala Asp	
115 100 105 110	
116 att ttc gtc ccg ctg att cca atc ttg gtt ggt ggc ggt ctg ctc atg	4162
117 Ile Phe Val Pro Leu Ile Pro Ile Leu Val Gly Gly Gly Leu Leu Met	
118 115 120 125	
119 gct atc aac aat gtg ttg gtt gcg cag gat ctg ttc ggt ccg caa tca	4210
120 Ala Ile Asn Asn Val Leu Val Ala Gln Asp Leu Phe Gly Pro Gln Ser	
121 130 135 140	
122 ctg gtg gag atg ttc cct cag atc agc ggt gtt gct gag atg atc aac	4258
123 Leu Val Glu Met Phe Pro Gln Ile Ser Gly Val Ala Glu Met Ile Asn	
124 145 150 155 160	
125 ctg atg gca tct gcg ccg ttc gcg ttg cca gtg ttg gtt ggt ttc	4306
126 Leu Met Ala Ser Ala Pro Phe Ala Phe Leu Pro Val Leu Val Gly Phe	
127 165 170 175	
128 acc gca acc aag cgt ttc ggt ggc aat gag ttc ctg ggc gcc ggc att	4354
129 Thr Ala Thr Lys Arg Phe Gly Gly Asn Glu Phe Leu Gly Ala Gly Ile	
130 180 185 190	
131 ggt atg gcg atg gtg ttc cca acc ctg gtt aac ggc tac gac gtg gcc	4402
132 Gly Met Ala Met Val Phe Pro Thr Leu Val Asn Gly Tyr Asp Val Ala	
133 195 200 205	
134 gcc acc atg acc gcg ggc gaa atg cca atg tgg tcc ctg ttt ggt ttg	4450
135 Ala Thr Met Thr Ala Gly Glu Met Pro Met Trp Ser Leu Phe Gly Leu	
136 210 215 220	
137 gat gtt gct caa gct ggt tac cag ggc acc gtg ctt cct gtg ctg gtg	4498
138 Asp Val Ala Gln Ala Gly Tyr Gln Gly Thr Val Leu Pro Val Leu Val	
139 225 230 235 240	
140 gtc tct tgg att ctg gca acg atc gag aag ttc ctg cac aag cga ctc	4546
141 Val Ser Trp Ile Leu Ala Thr Ile Glu Lys Phe Leu His Lys Arg Leu	
142 245 250 255	
143 atg ggc act gca gac ttc ctg atc acc cca gtg ttg act ctg ctg ctc	4594
144 Met Gly Thr Ala Asp Phe Leu Ile Thr Pro Val Leu Thr Ile Leu Leu	
145 260 265 270	
146 acc ggc ttc ctt acg ttc att gct att ggt cca gca atg cgc tgg gtg	4642
147 Thr Gly Phe Leu Thr Phe Ile Ala Ile Gly Pro Ala Met Arg Trp Val	
148 275 280 285	
149 ggt gac ttg ctg gca cac ggt ctg cag gga ctc tat gat ttc ggt ggt	4690
150 Gly Asp Leu Leu Ala His Gly Leu Gln Gly Leu Tyr Asp Phe Gly Gly	
151 290 295 300	
152 cca gtc ggc ggt ctg ctt ttc ggt ctg gtc tac tca cca atc gtt atc	4738

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156 Thr Gly Leu His Gln Ser Phe Pro Pro Ile Glu Leu Glu Leu Phe Asn			
157	325	330	335
158 cag ggt gga tcc ttc atc ttc gca acc gca tcc atg gcc aat atc gcg			4834
159 Gln Gly Ser Phe Ile Phe Ala Thr Ala Ser Met Ala Asn Ile Ala			
160	340	345	350
161 cag ggt gca gca tgt ttg gca gtg ttc ttc cta gcg aag agt gaa aag			4882
162 Gln Gly Ala Ala Cys Leu Ala Val Phe Phe Leu Ala Lys Ser Glu Lys			
163	355	360	365
164 ctc aag ggc ctt gca ggt gct tca ggt gtc tcc gct gtt ctt ggt att			4930
165 Leu Lys Gly Leu Ala Gly Ala Ser Gly Val Ser Ala Val Leu Gly Ile			
166	370	375	380
167 aca gag cct gcg atc ttc ggt gtg aac ctt cgc ctg cgc tgg ccg ttc			4978
168 Thr Glu Pro Ala Ile Phe Gly Val Asn Leu Arg Leu Arg Trp Pro Phe			
169 385	390	395	400
170 tac att ggt atc ggt acc gca gct atc ggt ggc gct ttg att gca ctc			5026
171 Tyr Ile Gly Ile Gly Thr Ala Ala Ile Gly Gly Ala Leu Ile Ala Leu			
172	405	410	415
173 ttt gat atc aag gca gtt gcg ttg ggc gct gca ggt ttc ttg ggt gtt			5074
174 Phe Asp Ile Lys Ala Val Ala Leu Gly Ala Ala Gly Phe Leu Gly Val			
175	420	425	430
176 gtt tct att gat gct cca gat atg gtc atg ttc ttg gtt tgc gcg gta			5122
177 Val Ser Ile Asp Ala Pro Asp Met Val Met Phe Leu Val Cys Ala Val			
178	435	440	445
179 gtt acc ttt gtc atc gca ttc ggc gca gcg att gct tat ggc ctt tac			5170
180 Val Thr Phe Val Ile Ala Phe Gly Ala Ala Ile Ala Tyr Gly Leu Tyr			
181	450	455	460
182 ttg gtt cgc cgc aac ggc agc att gat cca gat gca acc gct gct cca			5218
183 Leu Val Arg Arg Asn Gly Ser Ile Asp Pro Asp Ala Thr Ala Ala Pro			
184 465	470	475	480
185 gtg cct gca gga acg acc aaa gcc gaa gca gaa gca ccc gca gaa ttt			5266
186 Val Pro Ala Gly Thr Thr Lys Ala Glu Ala Glu Ala Pro Ala Glu Phe			
187	485	490	495
188 tca aac gat tcc acc atc atc cag gca cct ttg acc ggt gaa gct atc			5314
189 Ser Asn Asp Ser Thr Ile Ile Gln Ala Pro Leu Thr Gly Glu Ala Ile			
190	500	505	510
191 gca ctg agc agc gtc agc gat gcc atg ttt gcc agc gga aag ctt ggc			5362
192 Ala Leu Ser Ser Val Ser Asp Ala Met Phe Ala Ser Gly Lys Leu Gly			
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194 tca ggt gtt gcg atc gtc ccc acc aag ggg cag ctg gtt tca cca gtg			5410
195 Ser Gly Val Ala Ile Val Pro Thr Lys Gly Gln Leu Val Ser Pro Val			
196	530	535	540
197 agc gga aag atc gtg gtg gcc ttc cca tct ggt cac gct ttc gca gtc			5458
198 Ser Gly Lys Ile Val Val Ala Phe Pro Ser Gly His Ala Phe Ala Val			
199 545	550	555	560
200 cgc act aag gct gag gat ggt tcc aat gtg gat atc ttg atg cac att			5506
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205	580	585	590	
206	aag cag ggc gat gaa gtc aaa gca ggg gag ctg ctg tgt gaa ttc gat			5602
207	Lys Gln Gly Asp Glu Val Lys Ala Gly Glu Leu Leu Cys Glu Phe Asp			
208	595	600	605	
209	att gat gcc att aag gct gca ggt tat gag gta acc acg ccg att gtt			5650
210	Ile Asp Ala Ile Lys Ala Ala Gly Tyr Glu Val Thr Thr Pro Ile Val			
211	610	615	620	
212	gtt tcg aat tac aag aaa acc gga cct gta aac act tac ggt ttg ggc			5698
213	Val Ser Asn Tyr Lys Lys Thr Gly Pro Val Asn Thr Tyr Gly Leu Gly			
214	625	630	635	640
215	gaa att gaa gcg gga gcc aac ctg ctc aac gtc gca aag aaa gaa gcg			5746
216	Glu Ile Glu Ala Gly Ala Asn Leu Leu Asn Val Ala Lys Lys Glu Ala			
217	645	650	655	
218	gtg cca gca aca cca taagttgaaa ccttgagtgt tcgcacacag gtttagactag			5801
219	Val Pro Ala Thr Pro			
220	660			
221	gggacgtgac tctacgcata tttgacaccg gtacccgtac gcttcgagat tttaaacctg			5861
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235	Val Leu Lys Asp Thr Lys Asp Val Asp Arg Gln Ser Leu Asp Asp Asp			
236	35 40 45			
237	Pro Asp Leu Lys Gly Thr Phe Glu Thr Gly Gly Met Phe Gln Ile Ile			
238	50 55 60			
239	Val Gly Pro Gly Asp Val Asp His Val Phe Lys Glu Leu Asp Asp Ala			
240	65 70 75 80			
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243	Ala Asn Asn Ala Asn Trp Phe Ser Arg Ala Val Lys Val Leu Ala Asp			
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245	Ile Phe Val Pro Leu Ile Pro Ile Leu Val Gly Gly Leu Leu Met			
246	115 120 125			
247	Ala Ile Asn Asn Val Leu Val Ala Gln Asp Leu Phe Gly Pro Gln Ser			
248	130 135 140			
249	Leu Val Glu Met Phe Pro Gln Ile Ser Gly Val Ala Glu Met Ile Asn			
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VERIFICATION SUMMARY

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